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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,221	02/27/2004	Kouichi Okugami	70456-016	4835
7590	05/29/2008		EXAMINER	
MCDERMOTT, WILL & EMERY 600 13th Street, N.W. WASHINGTON, DC 20005-3096			KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
			3682	
			MAIL DATE	DELIVERY MODE
			05/29/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/787,221	OKUGAMI ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	JUSTIN KRAUSE	3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 October 2007.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 13-15 and 18 is/are pending in the application.

4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8 and 15 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 2/27/07 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/25/07, 10/22/07, 1/7/08, 4/1/08.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.



## **DETAILED ACTION**

### ***Requirement for Information Under 37 CFR §1.105***

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The IDS filed October 22, 2007 has been reviewed to the best extent possible. Due to the voluminous amount of references within the information disclosure statement, the examiner is hereby requesting that the applicant provide the following (see MPEP 609.09(a) III):

1. A list of 15 references that the applicant believes to be the most pertinent and relevant to the applicant's disclosure.
2. A concise explanation of relevance or English translation for each foreign reference and non-patent literature reference.
3. A concise explanation of relevance for each US reference. The following is an excerpt from MPEP 609.09 (a) III: "...Although a concise explanation of the relevance of the information is not required for English language information, applicants are encouraged to provide a concise explanation of why the English-language information is being submitted and how it is understood to be relevant. Concise explanations (especially those which point out the relevant pages and lines) are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability..."

The fee and certification requirements of 37 CFR §1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR §1.105 that are included in the applicant's first complete communication responding to this requirement. Any

supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR §1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated, the subject matter found in applicant's disclosure.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura et al (US Patent 6,440,232) in view of Takemura et al (US Patent 6,224,688).

The term "transmission component" is being treated under its broadest reasonable interpretation. Herein, transmission component is being treated as a component capable of transmitting a force.

The preamble recites intended use of the device and introduces no structure to the device. The preamble is deemed to end with the phrase, "said component having", with all previous language reciting the intended use environment of the device.

"The preamble is not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone." See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Takemura '232 discloses a rolling bearing that is a transmission component having material with a carbonitrided surface layer and a non-diffusible hydrogen content of at most 0.5 ppm. As Takemura '232 discloses the diffusible hydrogen content, and specifically details all of the other material contents, there is reason to believe, based on the detail to which the material composition is disclosed and does not include non-diffusible hydrogen that the non-diffusible hydrogen content of Takemura's material is zero. In accordance with *In re Best*, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977):

[W]here the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

This "burden of rebutting [may be of] the PTO's reasonable assertion of inherency under 35 USC 102, or of prima facie obviousness under 35 USC 103" (195 USPQ at 432).

Accordingly, the burden is placed upon the applicant to prove that the limitation(s) in question is/are not (an) inherent characteristic(s) of the reference disclosure.

Takemura '232 does not disclose a grain size number exceeding 10.

Takemura '688 discloses a rolling bearing having a nitriding layer at a surface layer with a grain size number of 11 or above (Col 5, line 59) for the purpose of forming ultra-fine crystal grains which retards cracking within the matrix (Col 5, lines 42-55).

Regarding the limitation that the nitriding layer is formed by a carbonitriding process, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 5-8, there is reason to believe, based on the similarity of (material, structure, etc.), that the functional limitation(s) of fracture stress may be (an) inherent characteristic(s) of Takemura's material. In accordance with *In re Best*, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977):

[W]here the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

This "burden of rebutting [may be of] the PTO's reasonable assertion of inherency under 35 USC 102, or of prima facie obviousness under 35 USC 103" (195 USPQ at 432).

Accordingly, the burden is placed upon the applicant to prove that the limitation(s) in question is/are not (an) inherent characteristic(s) of the reference disclosure.

Claims 1-8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura '232 in view of Takemura '688, further in view of Maeda et al (US Patent 6,423,158).

Takemura '232 and Takemura '688 disclose the claimed subject matter as described above, but do not explicitly disclose a tapered roller bearing having an inner ring, and outer ring and a tapered roller.

Maeda et al teaches a carbonitrided tapered roller bearing having an inner ring (13), an outer ring (15), and a tapered roller (16) in a transmission for the purpose of supporting both radial and thrust loads.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bearing of Takemura '688 by using a tapered roller bearing as taught by Maeda, the motivation would have been to support both radial and thrust loads.

***Response to Arguments***

Applicant's arguments filed 1/28/08 have been fully considered but they are not persuasive. Applicant's arguments fail to meet the burden of evidence required to overcome the presumption of inherency required by *Best*. The grain size number being 11 or above as claimed is recited within Takemura '688, as was recited in the previous office action.

Applicant argues that there no teaching, suggestion, or motivation recited, the argument that a specific teaching, suggestion or motivation be required is foreclosed by KSR v. Teleflex. The examiner finds that the product of the combination of references is within the ordinary capabilities of one skilled in the art.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN KRAUSE whose telephone number is (571)272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. K./  
Examiner, Art Unit 3682

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3682